from Greenly Island, some very large bergs, one being the largest ever seen by the captain or officers on the Atlantic; N. 48° 46′, W. 46° 54′, a large berg with pieces awash; N. 48° 33′, W. 47° 30′, a berg; N. 48° 20′, W. 48° 02′, a large berg; N. 46° 42′, W. 47° 11′, a small berg; N. 52° 44′, W. 51° 50′, several large and small bergs; from this position to N. 51° 09′, W. 57° 25′, on the 20th, large and small bergs, and numerous bergs about Belle Isle and in the straits; N. 52° 36′, W. 53° 00′, from this position to Belle Isle, a large number of bergs,

20th.—Belle Isle, five bergs; N. 46° 04′, W. 45° 44′, two bergs, one about one hundred and fifty feet, and the other about four hundred feet high; from Belle Isle through the straits, a number of very large bergs, many aground; N. 48° 45′, W. 47° 40′, a large berg; N. 55° 36′, W. 45° 48′, two bergs bearing north-northwest eight miles; N. 51° 13′, W. 57° 10′, three small bergs; passed several bergs, large and small, in the Straits of Belle Isle.

21st.—N. 52° 50′, W. 52° 14′, a large berg; N. 52° 15′, W. 53° 40′, a number of bergs, large and small; N. 48° 19′, W. 47° 40′, a large berg, partially obscured by fog.

23d.—N. 45° 27′, W. 45° 33′, a berg.

26th.—N. 52° 00′, W. 54° 15′, bergs of various sizes; Straits of Belle Isle thickly studded with bergs, reaching to forty-three miles west of Greenly Island, right in the track of vessels; a large number of bergs in the Straits of Belle Isle; also a large number to the eastward; the last one being about one hundred and sixty miles east-northeast of Belle Isle on 27th.

28th.—N. 47° 56′, W. 46° 21′, field of ice; N. 49° 05′, W. 44° 01′, six bergs of considerable size.

30th.—N. 47° 48′, W. 45° 36′, a piece of ice.

FOG IN JULY.

The limits of fog-belts west of the fortieth meridian are shown on chart i by dotted shading. In the vicinity of the Banks of Newfoundland fog was reported on eighteen dates, as compared with nineteen dates for June, 1889, and twenty-eight dates for July, 1888. Between the fifty-fifth and sixty-fifth meridians fog was reported on ten dates, as compared with eighteen dates for June, 1889, and thirteen dates for July, 1888. West of the sixty-fifth meridian fog was reported on eleven dates, as compared with fifteen dates for June, 1889, and thirteen dates for July, 1888. Compared with the preceding month there has been a decrease in fog-frequency west of the fortieth meridian, the decrease being most marked south of Nova Scotia. Over and near the Grand Banks fog was reported with the approach or passage of areas of low pressure, save on the 30th and 31st, when high pressure and variable winds prevailed. South of Nova Scotia fog was noted with the approach or presence of areas of low pressure, except on the 3d, 30th, and 31st, when the winds were variable or southerly and the pressure high in that region. West of the sixty-fifth meridian the development of fog attended the presence over the Gulf or Valley of Saint Lawrence or the Canadian Maritime Provinces of areas of low pressure, except on the 2d, 3d, and 30th, when high pressure and southeast winds prevailed off the coast of the United States.

The following are limits of fog-areas on the north Atlantic Ocean during July, 1889, as reported by shipmasters:

Date.	Entered. Lat. N.	Entered. Lon. W.	Cleared. Lat. N.	Cleared. Lon. W.
	° ′	° ′	° ′	° ′
1	.....	.....	47 15	40 13
2	41 10	66 32	40 40	67 40
3	42 22	60 55	42 30	61 30
3	42 22	65 17	42 30	68 23
3-5	46 52	52 18	Halifax.	
4-5	42 24	61 45	44 46	54 49
4-5	52 38	48 12	Near Belle Isle.	
4-5	53 49	48 38	52 01	55 00
5	53 18	52 44	52 38	53 08
5	44 50	56 30	43 00	57 00
5-6	42 28	48 57	42 12	51 01
6	46 01	50 06	45 07	54 05
6-7	48 10	48 15	46 55	48 30
7	48 20	47 54	47 44	49 55
7	43 27	49 58	43 26	50 27
10-13	47 42	47 00	44 29	57 30
11	43 30	44 30	43 20	49 20
12	43 00	49 00	42 45	50 00
13	40 58	67 50	40 49	70 17
13-14	42 18	64 36	Off Cape Cod.	
13-14	41 27	65 55	40 42	70 35
13-15	53 25	46 45	51 05	57 30
14	40 41	68 54	40 45	72 00
14-15	42 00	66 00	39 48	70 00
15	45 30	53 40	46 20	52 00
15	42 20	49 30	41 11	51 02
16	41 41	49 37	41 42	50 03
16	48 30	47 00	49 10	44 10
18-19	46 40	52 56	44 42	61 50
19-20	51 56	55 05	Off Point Amour.	
19-20	Off Belle Isle.		Cape Norman.	
19-20	53 44	48 32	55 00	42 18
20	40 51	68 16	40 47	68 40
20	39 40	71 00	40 02	71 08
20-21	46 05	45 04	45 48	50 13
20-21	40 20	68 55	40 16	69 45
20-21	46 49	52 25	45 32	56 53
20-21	44 15	56 30	42 00	63 10
21	42 26	64 10	42 26	65 50
21-22	43 20	64 18	40 40	67 25
21-22	53 37	51 31	54 00	49 50
22-23	43 10	65 40	42 38	68 40
22-23	41 05	67 00	40 35	69 45
22-24	46 16	44 12	45 06	51 46
23	45 02	45 40	44 10	48 58
24-25	44 31	47 24	44 08	48 49
25-26	42 00	52 50	41 00	55 15
29	41 05	66 57	40 46	68 35
29-30	42 46	64 58	42 28	68 24
30	44 25	52 20	44 40	51 40
30	43 00	61 10	42 35	66 20
30	42 30	63 00	42 28	67 15
30-31	48 00	47 30	47 35	52 03
31	44 33	49 37	42 12	61 30
31	53 36	48 00		

TEMPERATURE OF THE AIR (expressed in degrees, Fahrenheit).

The distribution of mean temperature over the United States and Canada for July, 1889, is exhibited on chart ii by dotted isotherms. In the table of miscellaneous meteorological data the monthly mean temperature and the departure from the normal are given for regular stations of the Signal Service. The figures opposite the names of the geographical districts in the columns for mean temperature and departure from the normal show, respectively, the averages for the several districts. The normal for any district may be found by adding the departure to the current mean when the departure is below the normal and subtracting when above. The monthly mean temperature for regular stations of the Signal Service represents the mean of the maximum and minimum temperatures.

In July, 1889, the mean temperature was highest in the lower valley of the Colorado River, where, at stations in adjoining parts of Arizona, California, and Nevada the values rose above 95°, the highest mean reading, 99°.8, being reported at Volcano Springs, Cal. On the Atlantic coast south of the thirty-third parallel, over the southern half of the east Gulf states, along the Mississippi River to Kentucky, at stations in Indian Territory and eastern and southeastern Texas, and in areas in central Missouri, central Kansas, northern Utah, northern Nevada, and the valleys of the Sacramento and San Joaquin rivers, Cal., the mean temperature was above 80°. The mean temperature was lowest along the California coast north of San Francisco, where it was below 55°; in the lower Saint Lawrence valley, the British Possessions north of Montana, the north Pacific coast, and at stations in central Colorado, it fell below 60°, and was below 70° north of a line traced from southwestern New England irregularly westward over the Lake region to the upper Missouri valley, thence southward to south-central New Mexico, north-northwest to northeastern Washington Territory, and at stations west of this line continued southward along the Pacific coast to southern California.

The departures from the normal temperature for the month were small. East of the Rocky Mountains the mean temperature was below the normal, except in Nova Scotia, the lower Saint Lawrence valley, the eastern part of the lower lake region, the northeastern portion of the upper lake region, in adjoining parts of Alabama, Georgia, Tennessee, and the Carolinas, and east-central and southeastern Texas, where the readings were slightly above the normal. The mean values were also below the normal in southern New Mexico and Arizona, in western California south of the thirty-ninth parallel, and on the Pacific coast north of the mouth of the Columbia River. In the Rocky Mountain and plateau regions, and on the Pacific coast between the thirty-ninth parallel and the Columbia River, the month was somewhat warmer than the average July.

Considered by districts, the greatest average departure below the normal temperature occurred on the southeastern slope of the Rocky Mountains, where it was 3°.4; in the Florida

Peninsula the average departure below the normal temperature was 1°.7; in New England, 1°.6; in the upper Mississippi valley and the northeastern slope of the Rocky Mountains, 1°.5; in the middle Atlantic states, 1°.3; in the west Gulf states, the Ohio Valley and Tennessee, and the extreme northwest, 1°.0; in the south Atlantic and east Gulf states, the lower lake region, middle-eastern slope of the Rocky Mountains, Missouri Valley, and the middle and south Pacific coasts, less than 1°.0. The greatest average departure above the normal, 1°.9, occurred in the northern plateau region. In the middle plateau region and on the north Pacific coast the average departure above the normal was 1°.8; in the southern plateau region, 1°.1, and in the upper lake region, 0°.1. In the Rio Grande Valley the mean temperature was normal.

The following are some of the most marked departures from the normal at the older established Signal Service stations:

Above normal.		Below normal.	
	°		°
Roseburgh, Oregon	4.4	Fort Assinniboine, Mont	3.1
Olympia, Wash	2.9	Key West, Fla	2.8
Salt Lake City, Utah	2.4	Boston, Mass	2.6
Fort Apache, Ariz	2.3	San Antonio, Tex	2.3
Fort Elliott, Tex	1.4	Saint Louis, Mo	2.2

DEVIATIONS FROM NORMAL TEMPERATURES.

The following table shows for certain stations, as reported by voluntary observers, (1) the normal temperature for a series of years; (2) the length of record during which the observations have been taken, and from which the normal has been computed; (3) the mean temperature for July, 1889; (4) the departure of the current month from the normal; (5) and the extreme monthly means for July during the period of observation and the years of occurrence:

Deviations from normal temperatures—Continued.

State and station.	County.	(1) Normal for the month of July.	(2) Length of record.	(3) Mean for July, 1889.	(4) Departure from normal.	(5) Extreme monthly mean temperature for July. Highest.	Year.	Lowest.	Year.
Arkansas.		°	*Years*	°	°	°		°	
Lead Hill	Boone	81.5	7	82.5	+1.0	84.2	1888	75.2	1882
California.									
Sacramento	Sacramento	73.1	36	68.3	−4.8	80.6	1854	68.3	1889
Colorado.									
Fort Lyon	Bent	79.1	19	76.6	−2.5	82.8	1868	72.3	1875
Connecticut.									
Middletown	Middlesex	71.1	21	68.9	−2.2	75.4	1886	66.9	1860
Florida.									
Merritt's Island	Brevard	79.9	5	79.6	−0.3	80.8	1887	78.5	1886
Georgia.									
Forsyth	Monroe	82.2	15	81.5	−0.7	85.7	1881	78.3	1882
Illinois.									
Peoria	Peoria	78.4	33	76.6	−1.8	83.2	1887	71.2	1865
Riley	McHenry	71.6	33	69.6	−2.0	80.2	1868	65.5	1882
Indiana.									
Vevay	Switzerland	77.8	23	75.3	−2.5	84.3	1868	73.0	1869
Iowa.									
Cresco	Howard	71.3	16	69.7	−1.6	75.2	1874	65.4	1882
Monticello	Jones	73.0	35	73.2	+0.2	79.3	1868	63.2	1863
Logan	Harrison	75.6	15	74.0	−1.6	79.5	1881	69.8	1882
Kansas.									
Lawrence	Douglas	78.4	27	76.0	−2.4	85.1	1868	72.0	1882
Wellington	Sumner	78.4	10	77.6	−0.8	83.9	1879	73.0	1882
Louisiana.									
Grand Coteau	Saint Landry	82.7	6	*	.....	85.4	1884	80.6	1886
Maine.									
Gardiner	Kennebec	69.0	49	66.4	−2.6	72.6	1855	64.7	1884
Maryland.									
Cumberland	Allegany	72.0	29	73.6	+1.6	77.7	1887	67.4	1860
Massachusetts.									
Amherst	Hampshire	70.8	53	68.8	−2.0	76.1	1887	66.4	1860
Newburyport	Essex	69.2	11	68.1	−1.1	71.1	1882	67.5	1884
Somerset	Bristol	74.1	17	73.3	−0.8	77.9	1876	71.4	1884, '88
Michigan.									
Kalamazoo	Kalamazoo	72.7	12	70.8	−1.9	77.8	1885	67.5	1884
Thornville	Lapeer	71.8	12	71.7	−0.1	76.2	1887	68.8	1884
Minnesota.									
Minneapolis	Hennepin	71.2	24	71.0	−0.2	77.2	1866	65.8	1882
Montana.									
Fort Shaw	Lewis & Clarke	68.5	20	65.8	−2.7	74.1	1886	61.5	1884
New Hampshire.									
Hanover	Grafton	69.4	46	69.5	+0.1	72.4	1870	62.3	1844
New Jersey.									
Moorestown	Burlington	75.3	26	72.7	−2.6	78.8	1863	70.6	1888
South Orange	Essex	73.3	18	70.9	−2.4	77.8	1876	69.3	1884
New York.									
Cooperstown	Otsego	68.5	35	66.9	−1.6	73.4	1854, '70	62.7	1860
Palermo	Oswego	69.6	35	68.4	−1.2	76.6	1864	62.3	1860
North Carolina.									
Lenoir	Caldwell	74.8	16	74.0	−0.8	77.7	1877	66.4	1884
Ohio.									
N'th Lewisburgh	Champaign	73.4	57	74.7	+1.3	81.0	1887	68.0	1835, '47
Wauseon	Fulton	72.8	19	71.4	−1.4	77.1	1887	67.7	1882
Oregon.									
Albany	Linn	66.0	11	69.9	+3.9	69.9	1889	63.2	1881
Eola	Polk	64.4	19	70.3	+5.9	70.3	1889	59.6	1888
Pennsylvania.									
Dyberry	Wayne	68.4	21	65.8	−2.6	72.6	1887	63.2	1865
Grampian Hills	Clearfield	70.7	25	70.8	+0.1	76.8	1887	66.6	1884
Wellsborough	Tioga	70.7	10	68.6	−2.1	76.1	1881	66.7	1884
South Carolina.									
Statesburgh	Sumter	79.1	8	77.9	−1.2	84.0	1881	77.5	1882, '86
Tennessee.									
Austin	Wilson	79.5	21	79.3	−0.2	85.2	1879	71.6	1885
Milan	Gibson	78.2	6	77.6	−0.6	80.7	1887	75.6	1883
Texas.									
New Ulm	Austin	82.7	17	81.3	−1.4	85.0	1879	80.6	1880
Vermont.									
Strafford	Orange	69.6	16	68.3	−1.3	73.5	1887	67.0	1881
Virginia.									
Bird's Nest	Northampt'n	78.9	21	78.6	−0.3	84.0	1887	74.3	1871
Wisconsin.									
Madison	Dane	72.0	20	71.0	−1.0	75.8	1859	67.7	1884
Washington.									
Fort Townsend	Jefferson	61.8	15	61.4	−0.4	66.1	1875	58.7	1879

*Report not received.

The above table shows that the mean temperature for July, 1889, was above the highest mean reported for the corresponding month of previous years at the stations named in Oregon. At Albany, with a record of eleven years, and Eola, with a record of nineteen years, the mean for the current month was 1°.0 and 0°.4 above the highest previous mean noted for 1886 and 1875, respectively. Unusually low mean temperatures are not shown by this table.

MAXIMUM AND MINIMUM TEMPERATURES.

The highest temperature reported at Signal Service stations was noted in the Gila, lower Colorado, and middle Sacramento valleys, where the values rose above 110°; the highest reading, 117°, being registered at Yuma, Ariz. Over a greater portion of the plateau regions south of the valley of the Columbia River, within an area extending from central Dakota southward over western Texas, and at Kitty Hawk, N. C., the maximum temperature rose to or above 100°. The lowest maximum temperatures were reported on the coast of California north of the thirty-eighth parallel, where they fell below 70°. At stations in Maine and the extreme southeast part of New England the maximum readings were below 80°. The following are maximum readings in the several states and territories where maximum temperature of 100° or over was reported, as shown by reports of United States Army post surgeons and state weather service and voluntary observers: Volcano Springs, Cal., 126°; Fort Mojave, Ariz., 120°; El Dorado Canyon, Nev., 119°; Saint George, Utah, 115°; Gibson, Kans., 114°; Fort Supply, Ind. T., and Fort Hancock, Tex., 111°; Fort Niobrara, Nebr., and Deming, N. Mex., 110°; Fort Lyon, Colo., 109°; Forts Sully and Bennett, Dak., 108°; Lead Hill, Ark., 107°; Powder River, Mont., and Fort Laramie, Wyo., 106; Haywood, Wis., 105°; Columbus and Meridian, Miss., Grant's Pass, Oregon, and Spartanburgh, S. C., 104°; Dale Enterprise, Va., 103°; Wiggins, Ala., Thomasville, Ga., Boisé Barracks, Idaho, McLeansborough, Ill., Blakeville, Iowa, Cameron, La., Lathrop, Mich., Miami, Mo., and Forts Spokane and Walla Walla, Wash., 102°; Farmington and Fort Snelling, Minn., and Utica, N. Y., 100°. At the following-named Signal Service stations the maximum temperature was as high, or higher, than has been noted for the corresponding month of previous years: Fort Elliott, Tex., ten years record, 6° above the highest previous temperature for July, noted for two or more years; Fort Grant, Ariz., ten years record, the same as maximum of two or more preceding years; Salt Lake City, Utah, sixteen years record, 2° above maximum of 1885; Los Angeles, Cal., thirteen years record, the same as maximum of

1884. At a majority of the older established Signal Service stations in New England the highest temperature for July was recorded in 1876; on the middle Atlantic coast, in Tennessee, the west part of the lower lake region, and at the more southern stations on Lake Michigan, in 1887; on the south Atlantic coast in 1879; in the Ohio Valley, in 1874 or 1881; in the upper Missouri valley, Montana, and Idaho, in 1886; in Arkansas and Indian Territory, in 1884; and on the north Pacific coast in 1885. In other districts the periods of occurrence of the highest temperature were irregular. Among extremely high temperatures reported for July in preceding years by United States Army post surgeons and voluntary observers are, 128° at Mammoth Tank, Cal., and 122° at Humboldt, Cal., in 1887; 119° at Fort Mojave, Ariz., in 1877, and at Fort Miller, Cal., in 1853. Among high temperatures for July at Signal Service stations, other than those given in the table of miscellaneous meteorological data, are 109° at Fort Gibson, Ind. T., in 1879; 111° at Fort Benton, Mont., in 1886; and 115° at Fort Bayard, N. Mex., in 1882.

The only regular station of the Signal Service reporting temperature below 32°, excepting Mount Washington, N. H., where 30° was registered, was Fort Klamath, Oregon, where the temperature fell to 24° on the 6th. At stations in central Montana, and at Cheyenne, Wyo., and Moorhead, Minn., the temperature fell below 40°. North of a line traced irregularly westward from Eastport, Me., to the upper Missouri valley, and thence irregularly south of west to San Francisco, Cal., the minimum temperature fell below 50°. The highest minimum temperatures were noted along the coasts of South Carolina, Georgia, Florida, the Gulf coast, and in the middle Gila valley, where they were above 70°. At the following-named stations the minimum temperature was as low or lower than previously recorded for July during the periods of observation: Port Huron, Mich., sixteen years record, 1° below the minimum of 1886; La Crosse, Wis., seventeen years record, the same as minimum of 1887; Des Moines, Iowa, eleven years record, 1° below minimum of 1882 and 1887; Dubuque, Iowa, seventeen years record, the same as minimum of 1882; Keokuk, Iowa, nineteen years record, 2° below minimum of 1873, 1880, and 1883; Fort Custer, Mont., ten years record, the same as minimum of 1883; Cheyenne, Wyo., seventeen years record, the same as minimum of 1882; North Platte, Nebr., fifteen years record, 3° below minimum of 1877 and 1882; Portland, Oregon, seventeen years record, the same as minimum of 1887. In Maryland, Virginia, the District of Columbia, and the Ohio Valley, the lowest temperature ever reported for July was generally noted in 1885; in eastern North Carolina in 1888; along the east Gulf coast in 1882; in Arizona in 1879; and on the north and middle Pacific coast in 1887. In all other districts the periods of occurrence were irregular. The reports of United States Army post surgeons and state weather service and voluntary observers show the following minimum temperature values of 32° or below, in July, 1889: Volunteer Springs, Ariz., 26°; Alma, Colo., 29°; Breckenridge, Colo., 25°; Dolly Varden Mines, Colo., 30°; Soda Springs, Idaho, 26°; Humboldt, Iowa, 32°; Fort Logan, Mont., 31°; Camp Sheridan and Fort D. A. Russell, Wyo., 32° and 30°, respectively.

RANGES OF TEMPERATURE.

The greatest and least daily ranges of temperature at regular stations of the Signal Service are given in the table of miscellaneous meteorological data. The greatest monthly ranges occurred within an area extending from south-central Nebraska to southern Dakota, where they exceeded 60°. The monthly ranges generally exceeded 50° in the Red River of the North and upper Missouri valleys, over the middle, eastern, and northeastern slopes of the Rocky Mountains, the northern and middle plateau regions, and from southwestern Arizona west of north over the San Joaquin and Sacramento valleys to central and eastern Oregon. The monthly ranges were least along the Gulf coast, where they were less than 20°, and were less than 30° along a greater part of the Pacific coast.

The following are some of the extreme monthly ranges:

Greatest.		Least.	
	°		°
Fort Klamath, Oregon	68.0	Corpus Christi, Tex	17.0
Valentine, Nebr	62.0	Key West, Fla	18.0
Huron, Dak	60.0	Eureka, Cal	21.0
Boise City, Idaho	58.0	Port Eads, La	21.0
Fresno, Cal	57.0	Point Reyes Light, Cal	22.0

FROST.

The only report of frost injurious to vegetation during July, 1889, was received from Mr. Jesse E. Glick, voluntary observer at Coulter, Colo., who states that thin ice formed, and frost caused injury to vegetables during the night of the 2–3d.

Frost was noted during the month, as follows: *Colorado:* Coulter, 2d, 3d, 17th, 18th, 24th, and 28th. *Illinois:* Charleston, 26th; Sycamore, 27th. *Montana:* Sheldon, 2d, 8th. *Oregon:* East Portland, 1st; Fort Klamath, 1st, 6th, 31st. *Utah:* Beaver, 3d. *Vermont:* Lunenburgh, 25th. *Kansas:* Tribune, 3d. *Michigan:* 24th, 25th in the northern sections.

TEMPERATURE OF WATER.

The following table shows the maximum, minimum, and mean water temperature as observed at the harbors of the several stations; the monthly range of water temperature; and the mean temperature of the air for July, 1889:

Stations.	Temperature at bottom.				Mean temperature of air at the station.
	Max.	Min.	Range.	Monthly mean.	
	°	°	°	°	°
Boston, Mass	66.4	61.2	5.2	64.4	69.4
Canby, Fort, Wash	66.0	59.8	6.2	63.0	58.3
Cedar Keys, Fla	89.9	80.3	9.6	85.5	81.4
Charleston, S. C	87.2	79.0	8.2	82.6	81.4
Eastport, Me	51.6	46.4	5.2	50.0	60.7
Galveston, Tex	88.5	84.0	4.5	87.1	83.8
Key West, Fla	90.2	85.0	5.2	87.0	83.2
Nantucket, Mass	75.0	71.5	3.5	73.3	67.0
New York City	72.7	66.0	6.7	69.2	73.5
Portland, Oregon	77.8	68.2	9.6	73.8	70.4

PRECIPITATION (expressed in inches and hundredths).

The distribution of precipitation over the United States and Canada for July, 1889, as determined from the reports of nearly 2,000 stations, is exhibited on chart iii. In the table of miscellaneous meteorological data the total precipitation and the departure from the normal are given for each Signal Service station. The figures opposite the names of the geographical districts in the columns for precipitation and departure from the normal show, respectively, the averages for the several districts. The normal for any district may be found by adding the departure to the current mean when the precipitation is below the normal and subtracting when above.

In July, 1889, the precipitation was greatest in areas in the Atlantic coast states from Massachusetts to South Carolina, in southwestern Vermont, northeastern Georgia, along the Gulf coast of Florida north of Tampa Bay, in north-central Alabama and the adjoining part of Tennessee, extreme southern Louisiana, northeastern and south-central Texas, central Arkansas, south-central Indiana, and south-central Nebraska and adjoining parts of Kansas, where it exceeded 10 inches, and where, at stations in south-central Connecticut, eastern Pennsylvania, northern and western New Jersey, and northeastern Georgia, it was more than 15 inches, the greatest